# Effectiveness of health and safety measures at Apollo Tyre ltd: an Analysis

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**Abstract:** The ability to motivate employee is an important skill for managers and caring co-workers. Organizations that have people trained in motivating will be better able to handle their people issues than those that do not. Staffs who are feeling anxious, stressed, or unhappy will not be perform to very well on the job despite their background and experience. The ability to motivate employee is an important skill for managers and caring co-workers. Organizations that have people trained in motivating will be better able to handle their people issues than those that do not. Staffs who are feeling anxious, stressed, or unhappy will not be perform to very well on the job despite their background and experience. If they have had an opportunity to talk through their problems with a trained counselor, they will be able to be much more productive. This will save the organization time and money.

Key words: Health, safety, Employee, Awareness.

### INTRODUCTION OF THE STUDY:

Due to rapid industrialization, industrial workers are exposed to several types of hazards and accidents. Every year lakh of workers are injured due to mechanical, chemical, electrical and radiation hazards and it leads to partial or total disablement. So in recent years, greater attention is given to health and safety due to pressure from government, trade unions, labor laws awareness of employers. The efficiency workers depend to a great extends on the environment in which they work. Work environment consist of all the factors, which act and react on the body and mind of an employee. The primary aim is to create an environment which ensures the greatest ease of work and removes all causes of worries. Occupational scope involving many specialized fields. health and safety is a discipline with a broad

### **NEED AND SIGNIFICANCE OF THE STUDY:**

Health and safety measures are inevitable to any organization where workers are involved it's an organization's responsibility to provide to its workers beyond the payment of wages for their services. The worker's health and safety on and off the job within the organization is a vital concern the of employer. The working environment in a factory adversely affects the worker's health and safety because of the excessive heat or cold, noise, odors, fumes, dust and lack of sanitation and pure air etc., which leads to accident or injury or disablement or loss of life to the workers. Providing a health and safer environment is a pre-requisite for any productive effort. These must be held in check by providing regular health check-up, protective devices and compensatory benefits to the workers. This research deals with the study on the effectiveness of health and safety measures implemented in Apollo tyres ltd, Vadodara.

### **SCOPE OF THE STUDY:**

This study would give an overview of the effectiveness of health and safety measures APOLLO **TYRES** implemented in LTD. VADODARA. Since health and safety are two important elements essential for improving the productivity of an organization, a study on the existing health and safety measures would help the organization to perform better. This study would throw light on the perception of the workers regarding health and safety. This study would also help to analyze the satisfaction level of the workers towards health and safety measures and suggest provisions to improve health and safety.

### **OBJECTIVES OF THE STUDY:**

- 1. To identify the health and safety measures implemented in Apollo Tyres Ltd, Vadodara.
- 2. To identify the health and safety problems in Apollo Tyres.
- 3. To study how far the company is complying the relevant Acts and rules of health and safety in industry.
- 4. To study the awareness of the workers about health and safety in the workplace.
- 5. Perspective of workers about the effectiveness of health and safety measures implemented in the company.

# **RESEARCH DESIGN:**

A research design is an arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research project with economy in procedure. Fundamental of the success of any research project is the sound research design. It specifies

the method for data collection and analysis.

#### **RESEARCH APPROACH:**

This Research is done on a survey method which is conducted by meeting each and every respondent and collected data from them.

### **SOURCES OF DATA:**

PRIMARY DATA COLLECTION: These are fresh data which are collected for the first time. The present study used primary data by conducting a survey among the workers of Apollo Tyres Ltd using questionnaire .The data collected have analyzed and interpreted using appropriate statistical tools.

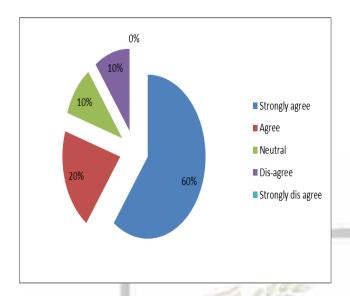
**SECONDARY DATA COLLECTION:** Secondary data consist of information that already exists somewhere and have been collected for specific purpose in the study. The secondary data for this study arenewspapers, internet etc journals, magazines published by the company.

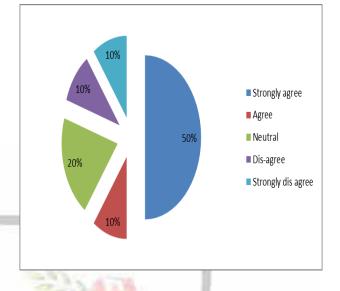
### DATA ANALYSIS AND INTERPRETATION:

# A. Organizational context:

Do you have a clearly identified health and safety program?

Particulars	Value	Percentage
Strongly agree	60	60
Agree	20	20
Neutral	10	10
Dis-agree	10	10
Strongly dis agree	0	0
Total	100	100





From the above table it can be revealed that out of 100 respondents, 60 respondents are strongly agree, 20 respondents are agree, 10 respondents are neutral, 10 respondents are disagree and strongly disagree are 0.

Do you have goals at all level of the organization?

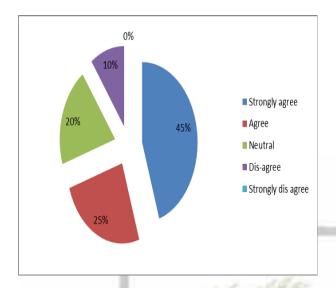
Particulars	Value	Percentage
Strongly	50	50
agree	13	\
Agree	10	10
Neutral	20	20
Dis-agree	10	10
Strongly	10	10
dis agree	-	
Total	100	100

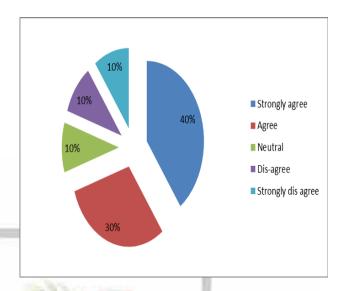
### **INTERPRETATION:**

From the above table it can be revealed that out of 100 respondents, 50 respondents strongly agree, 10 respondents agree, 20 respondents neutral, 10 respondents disagree, 10 respondents strongly disagree.

Do you have a combination of reactive and proactive measures?

Particulars	Value	Percentage
Strongly	45	45
agree	1	
Agree	25	25
Neutral	20	20
Dis-agree	10	10
Strongly	0	0
dis agree		-
Total	100	100





From the above table it can be revealed that out of 100 respondents, 45 respondents strongly agree, 25 respondents agree, 20 respondents neutral, 10 respondents disagree, 0 respondents strongly disagree.

# B. Systems and processes

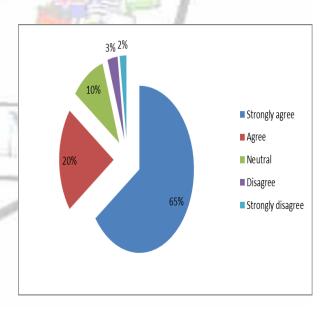
Do you have effective reporting of incident and accident statistics?

Particulars	Value	Percentage
Strongly	40	40
agree		1.3
Agree	30	30
Neutral	10	10
Dis-agree	10	10
Strongly dis	10	10
agree		
Total	100	100

### **INTERPRETATION:**

From the above table it can be revealed that out of 100 respondents, 40 respondents strongly agree, 30 respondents agree, 10 respondents neutral, 10 respondents disagree, 10 respondents strongly disagree.

Do you have in place effective audits of your health and safety system?



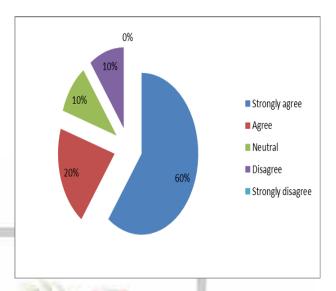
Particulars	Value	Percentage
Strongly	65	65
agree		
Agree	20	20
Neutral	10	10
Disagree	3	3
Strongly	2	2
disagree	1	
Total	100	100

From the above table it can be revealed that out of 100 respondents, 65 respondents strongly agree, 20 respondents agree, 10 respondents neutral, 3 respondents disagree, 2 respondents strongly disagree.

# C. Skills and knowledge

Do you assess an employee's competence after induction?

Particulars	Value	Percentage
Strongly	60	60
agree		
Agree	20	20
Neutral	10	10
Disagree	10	10
Strongly	0	0
disagree		
Total	100	100

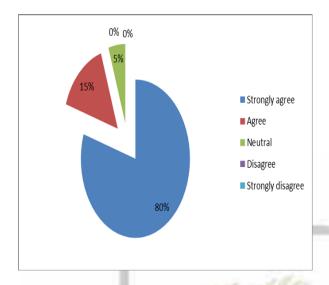


### **INTERPRETATION:**

From the above table it can be revealed that Out of 100 respondents, 60 respondents are strongly agree, 20 respondents are agree, 10 respondents are neutral and 10 respondents are disagree and the respondents who are strongly disagree are 0.

# Do you have a process for assessing trainer competency?

Particulars	Value	Percentage
Strongly	80	80
agree		
Agree	15	15
Neutral	5	5
Disagree	0	0
Strongly	0	0
disagree		
Total	100	100

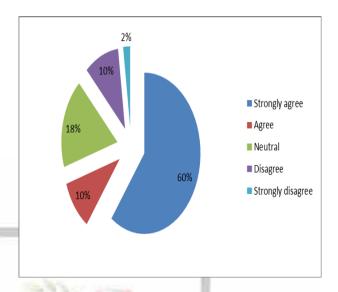




From the above table it can be revealed that out of 100 respondents, 80 respondents strongly agree, 15 respondents agree, 5 respondents neutral, 0 respondents disagree, 0 respondents strongly disagree.

Do you identify needs by measuring competencies against requirements and measuring the percentage of skill achievement?

Particulars	Value	Percentage
Strongly	60	60
agree	7	
Agree	10	10
Neutral	18	18
Disagree	10	10
Strongly	2	2
disagree		
Total	100	100

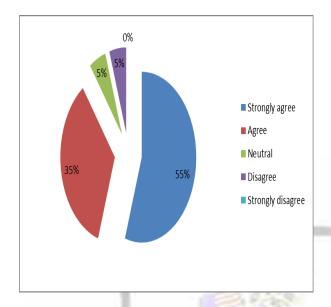


### INTERPRETATION:

From the above table it can be revealed that out of 100 respondents, 60 respondents strongly agree, 10 respondents agree, 18 respondents neutral, 10 respondents disagree, 2 respondents strongly disagree.

Do you have effective peer based safety behavior assessments?

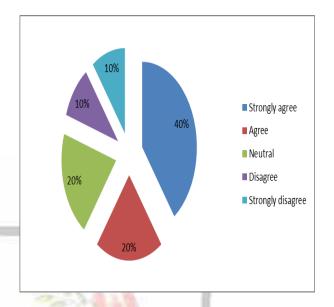
Particulars	Value	Percentage
Strongly	55	55
agree		
Agree	35	35
Neutral	5	5
Disagree	5	5
Strongly	0	0
disagree		
Total	100	100



From the above table it can be revealed that out of 100 respondents, 55 respondents strongly agree, 35 respondents agree, 5 respondents neutral, 5 respondents disagree, respondents strongly disagree.

Are trends identified to identify potential health and safety issues at an organizational and departmental level?

Particulars	Value	Percentage
Strongly	40	40
agree	\	
Agree	20	20
Neutral	20	20
Disagree	10	10
Strongly	10	10
disagree		
Total	100	100



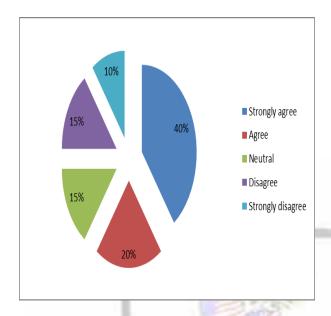
# INTERPRETATION:

From the above table it can be revealed that out of 100 respondents, 40 respondents strongly agree, 20 respondents agree, 20 respondents neutral, 10 respondents disagree, 10 respondents strongly disagree.

# D. Attitude, perception and leadership

Do you evaluate employee' perception of the organizations health and safety issues to discover how close employee and supervisors are in understanding their responsibilities?

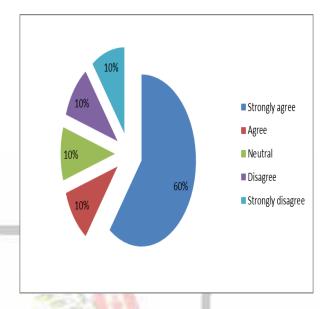
Particulars	Value	Percentage
Strongly	40	40
agree		D
Agree	20	20
Neutral	15	15
Disagree	15	15
Strongly	10	10
disagree		
Total	100	100



From the above table it can be revealed that out of 100 respondents, 40 respondents strongly agree, 20 respondents agree, 15 respondents neutral, 15 respondents disagree, 10 respondents strongly disagree.

Do you assess the employee level of involvement in existing safety programmers?

Particulars	Value	Percentage
Strongly	60	60
agree	->	
Agree	10	10
Neutral	10	10
Disagree	10	10
Strongly	10	10
disagree		
Total	100	100

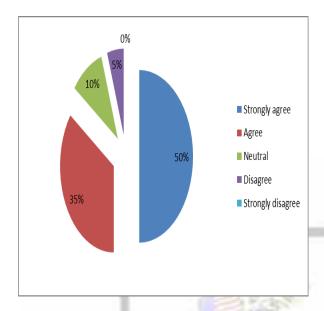


### **INTERPRETATION:**

From the above table it can be revealed that out of 100 respondents, 60 respondents strongly agree, 10 respondents agree, 10 respondents neutral, 10 respondents disagree, 10 respondents strongly disagree.

Do you assess the employee perception regarding the existing safety management system to gain insight into employee' and supervisors concept of the organizations sincerity regarding safety?

Particulars	Value	Percentage
Strongly	50	50
agree		1
Agree	35	35
Neutral	10	10
Disagree	5	5
Strongly	0	0
disagree		
Total	100	100



From the above table it can be revealed that out of 100 respondents, 50 respondents strongly agree,35 respondents agree,10 respondents neutral,5 respondents disagree,0 respondents strongly disagree.

### **NULL HYPOTHESIS**

H<sub>0</sub>:-competence is not affected by induction.

PARTIC ULARS	STR ONG LY AGR EE	AGR EE	NEU TRA L	DIS- AGR EE	STR ONG LY DIS- AGR EE	TOT AL
employee 's compete nce after induction	60	20	10	10	0	100
trainer compete ncy	80	15	5	0	0	100
requirem ents of compete ncy	60	10	18	10	2	100
TOTAL	200	45	33	20	2	300

$X = \sum (F_0 F_e)^- / F_e$					
Fo	$\mathbf{F_e}$	$(\mathbf{F_0F_e})^2/\mathbf{F_e}$			
60	66.66	0.67			
20	15	1.67			
10	11	0.09			
10	20	5			
0	0.67	0.67			
80	66.67	2.67			
15	15	0			
5	11	3.27			
0	20	20			
0	0.67	0.67			
60	66.67	0.67			
10	15	1.67			
18	11	4.45			
10	20	5			
2	0.67	2.64			
TOTAL	-	49.14			

### **DEGREE OF FREEDOM:**

$$\begin{aligned} D_f &= (r-1)(C-1) \\ &= (3-1)(5-1) \\ &= (2)(4) \\ &= (8) \end{aligned}$$

**LEVEL OF SIGNIFICANCE: = 0.01** 

**CALCULATED VALUE: = 49.14** 

**TABULATED VALUE: = 20.090** 

CAL VALUE > TAB VALUE

49.14 > 20.090

**CONCLUSION:** 

SO, WE REJECT H<sub>0</sub>.

So it infers that, competence is not affected by induction. , and increase health and safety measures.

## **FINDINGS:**

## **CALCULATION OF CHI SQUARE:-**

Majority of the respondents are aware about the health and safety measures adopted in the company. Only 10% of the respondents are not aware about the health and safety measures adopted in the company.

60% of the respondents say that they are having goals at all level of the organization. 20% of the respondents say that they are not having goals at all level of the organization.

85% of the respondents says that they are having in place effective audits of your health and safety system 5% of the respondents says that they are not having in place effective audits of your health and safety system.

70% of the respondents say that they are have effective reporting of incident and accident statistics. 20% of the respondents say that they are have effective reporting of incident and accident statistics.

80% of the respondents say that they are assessing an employee's competence after induction. 10% of the respondents say that they are not assessing an employee's competence after induction.

70% of the respondents says that they are identify needs by measuring competencies against requirements and measuring the percentage of skill achievement.12% of the respondents says that they are not identify needs by measuring competencies against requirements and measuring the percentage of skill achievement.

90% of the respondents say that they have effective peer based safety behavior assessments

5% of the respondents say that they are not have effective peer based safety behavior assessments.

### LIMITATION OF THE STUDY:

- All the limitations of secondary data are applicable to the study.
- Another limitation involves the biases that can come in to play as a result of survey respondents who attempt to convey a favorable impression of their firm.
- Some of the workers are not well educated. So it was difficult to convey

### **CONCLUSION:**

It is revealed from the study that, the health and safety measures adopted in Apollo Tyres Limited Vadodara. Provided to the workers according to the provisions of the factories act. It reveals that the awareness of the workers about health and safety in workplace is inadequate Suitable ideas were suggested to avoid those accidents and to improve the health and safety measures. The role of management in implementing health and safety in the organization is very effective; most of the workers were satisfied with the health and safety measures adopted in the company. If the company implements effective disciplinary procedures; it will help the company to go with their policies and also to maintain health and safety in the organization.

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